

Influenza Vaccine Tables

2008 - 2009 Influenza Season

Both trivalent inactivated vaccine (TIV) and live, attenuated influenza vaccine (LAIV) prepared for the 2008 – 2009 season include A/Brisbane/59/2007 (H1N1)-like, A/Brisbane/10/2007 (H3N2)-like, and B/Florida/4/2006-like antigens.

Approved Influenza Vaccines for Different Age Groups

Vaccine	Trade name	Manufacturer	Dose/ Presentation	Thimerosal content (mcg Hg/0.5-mL dose)	Age group	No. of doses
Inactivated influenza vaccine (TIV)*						
TIV	Fluzone®	sanofi pasteur	0.25 mL prefilled syringe	0	6 - 35 mos	1 or 2 [†]
			0.5 mL prefilled syringe	0	≥36 mos	1 or 2 [†]
			0.5 mL vial	0	≥36 mos	1 or 2 [†]
			5.0 mL multidose vial	25	≥6 mos	1 or 2 [†]
TIV	Fluvirin®	Novartis Vaccine	5.0 mL multi-dose vial	24.5	≥4 yrs	1 or 2 [†]
			0.5 mL prefilled syringe	≤1.0	≥4 yrs	1 or 2 [†]
TIV	Fluarix®	GlaxoSmithKline	0.5 mL prefilled syringe	≤1.0	≥18 yrs	1
TIV	FluLaval®		5.0 mL multidose vial	25	≥18 yrs	1
TIV	Afluria®	CSL Biotherapies	0.5 mL prefilled syringe	0	≥18 yrs	1
			5.0 mL multidose vial	25	≥18 yrs	1
Live, attenuated influenza vaccine (LAIV)						
LAIV	FluMist®¶	MedImmune	0.2 mL sprayer	0	2 - 49 yrs	1 or 2 [†]

* Administer TIV intramuscularly (IM). For adults and older children, the recommended site is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh.

† 2 doses administered ≥ 4 weeks apart are recommended for children < 9 years of age who are receiving TIV or LAIV for the first time. All children aged < 9 years of age who have not been vaccinated against influenza previously should receive 2 doses of the vaccine, > 4 weeks apart, the first flu season they are vaccinated. Children < 9 years of age who were vaccinated for the first time during the 2007 – 08 flu season, but received only one dose that season should receive 2 doses during the 2008 – 09 season. All other children < 9 years of age who have previously received > 1 dose of influenza vaccine at any time should receive 1 dose of the 2008 – 2009 influenza vaccine.

¶ FluMist storage and dosage requirements have changed. Store FluMist at 35°F – 46°F (2°C – 8°C) upon receipt and keep at that temperature until the expiration date is reached. The dose is 0.2 mL, divided equally between each nostril

Tables adapted from those in CDC. Prevention and control of influenza: recommendations of the ACIP. MMWR 2008;57(No. RR-1):1-60. <http://www.cdc.gov/mmwr/PDF/rr/rr5707.pdf>

Live, Attenuated Influenza Vaccine (LAIV) Compared with Inactivated Influenza Vaccine (TIV)

Factor	LAIV	TIV
Route of administration	Intranasal spray	Intramuscular injection
Type of vaccine	Live virus	Killed virus
Number of included virus strains	3 (2 influenza A, 1 influenza B)	3 (2 influenza A, 1 influenza B)
Frequency of administration	Annually*	Annually*
Approved age and risk groups [§]	Healthy persons aged 2 – 49 years	Persons aged ≥ 6 months
Interval between 2 doses recommended for children aged 6 mos - 8 yrs who are receiving influenza vaccine for the first time	4 weeks	4 weeks
Can be administered to family members or close contacts of immunosuppressed persons not requiring a protected environment and of persons at high risk but not severely immunosuppressed	Yes	Yes
Can be administered to family members or close contacts of immunosuppressed persons requiring a protected environment (e.g., hematopoietic stem cell transplant recipient)	No	Yes
Can be administered to people with asthma or wheezing	No**	Yes
Can be simultaneously administered with other vaccines	Yes [¶]	Yes ^{¶¶}
If not simultaneously administered, can be administered ≤ 4 weeks of another live vaccine	Prudent to space 4 weeks apart	Yes
If not simultaneously administered, can be administered ≤ 4 weeks of an inactivated vaccine	Yes	Yes

* 2 doses administered ≥ 4 weeks apart are recommended for children < 9 years of age receiving TIV or LAIV for the first time. Children aged < 9 years of age who have not been vaccinated against influenza previously should receive 2 doses of the vaccine, > 4 weeks apart, the first flu season they are vaccinated. Children < 9 years of age who were vaccinated for the first time during the 2007 – 08 flu season, but received only one dose that season should receive 2 doses during the 2008 – 09 season. All other children < 9 years of age who previously received ≥ 1 dose of flu vaccine at any time should receive 1 dose of the 2008 – 09 flu vaccine.

** Asthma in people of any age, and wheezing in children < 5 years of age, is a contraindication to the use of LAIV. Wheezing in children and adults ≥ 5 years of age is not a contraindication to LAIV.

For children 2 - 4 years of age, wheezing within the previous 12 months is a contraindication to the use of LAIV. To screen for wheezing in this age group consult the medical record, if available, and ask the parent/guardian, “In the past 12 months, has a health care provider ever told you that your child has wheezing or asthma?” If the answer is yes, use TIV.

[¶] No data are available regarding effect on safety or efficacy.

^{¶¶} TIV coadministration has been evaluated only among adults with pneumococcal polysaccharide vaccine.